GRUMMAN AIRCRAFT
ENGINEERING CORPORATION

21st Annual Report
1950
GRUMMAN PANTHERS ABOARD CARRIER LEYTE

At anchor in Sasebo Harbor, Japan, the carrier Leyte is identified by crew members who spell the big ship's name on the forward flight deck. Immediately behind this formation a Grumman Panther squadron is spotted. The pilots of these F9F's, like Panther pilots on other carriers operating in Korean waters, have flown their aircraft on an amazing variety of missions. The Panther is the only carrier-based jet fighter employed, to date, in the Korean conflict and it has performed tasks ranging from low-level ground support of troops to air-combat at altitudes upwards of 30,000 feet.
Grumman Aircraft Engineering Corporation

DIRECTORS
LEROY R. GRUMMAN  CHARLES A. WIGHT
ALBERT P. LOENING  WM. T. SCHWENDLER
LEON A. SWIRBUL  EDMUND W. POOR
E. CLINTON TOWL

OFFICERS
LEROY R. GRUMMAN  - - - - - - Chairman of the Board
LEON A. SWIRBUL  - - - - - - - President
WM. T. SCHWENDLER  - - - - - Executive Vice-President
E. CLINTON TOWL  - - - - - - - Vice-President
JOSEPH A. STAMM  - - - - - - - Secretary
EDMUND W. POOR  - - - - - - - Treasurer

TRANSFER AGENT
Bankers Trust Company, 16 Wall Street, New York City

REGISTRAR
Chemical Bank & Trust Company, 165 Broadway, New York City
<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Sales</th>
<th>Net Income After Prov. For Taxes</th>
<th>Percent Net Income To Gross Sales</th>
<th>Dividends Paid</th>
<th>Percent Dividends Paid to Net Income</th>
<th>Shares Outstanding At Dec. 31</th>
<th>Based On Shares Outstanding At Dec. 31</th>
<th>Earnings Per Share</th>
<th>Dividends Paid Per Share</th>
<th>Number of Stockholders At Dec. 31</th>
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<tr>
<td>1941</td>
<td>$21,858,680</td>
<td>$1,066,682</td>
<td>4.88%</td>
<td>$762,090</td>
<td>71.4%</td>
<td>508,060</td>
<td>$2.10</td>
<td>$1.50</td>
<td>2018</td>
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<td>1942</td>
<td>$143,155,930</td>
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<td>$762,090</td>
<td>22.1%</td>
<td>508,060</td>
<td>$6.80</td>
<td>$1.50</td>
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<td>1943</td>
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<td>$6,598,287</td>
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<td>11.5%</td>
<td>508,060</td>
<td>$12.99</td>
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<td>1944</td>
<td>$323,749,330</td>
<td>$9,550,001</td>
<td>2.95%</td>
<td>$762,090</td>
<td>8.0%</td>
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<td>1945</td>
<td>$236,846,861</td>
<td>$5,713,528</td>
<td>2.41%</td>
<td>$762,090</td>
<td>13.3%</td>
<td>508,060</td>
<td>$11.25</td>
<td>$1.50</td>
<td>1945</td>
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<td>1946</td>
<td>$37,615,540</td>
<td>$337,771</td>
<td>.90%</td>
<td>$1,016,120</td>
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<td>$.66</td>
<td>$2.00</td>
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<td>1947</td>
<td>$24,241,247</td>
<td>$2,291,120</td>
<td>9.45%</td>
<td>$1,500,000</td>
<td>65.5%</td>
<td>500,000</td>
<td>$4.58</td>
<td>$3.00</td>
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<td>1948</td>
<td>$41,031,662</td>
<td>$2,393,311</td>
<td>5.83%</td>
<td>$2,000,000</td>
<td>83.6%</td>
<td>1,000,000</td>
<td>$2.39</td>
<td>$2.00</td>
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<tr>
<td>1949</td>
<td>$59,756,838</td>
<td>$3,191,520</td>
<td>5.34%</td>
<td>$2,000,000</td>
<td>62.7%</td>
<td>1,000,000</td>
<td>$3.19</td>
<td>$2.00</td>
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<tr>
<td>1950</td>
<td>$102,312,498</td>
<td>$6,242,064</td>
<td>6.10%</td>
<td>$4,000,000</td>
<td>64.1%</td>
<td>2,000,000</td>
<td>$3.12</td>
<td>$2.00</td>
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To the Stockholders of

GRUMMAN AIRCRAFT ENGINEERING CORPORATION

This report covers the operation of Grumman Aircraft Engineering Corporation and subsidiary for the year 1950, and includes a statement of the financial condition of the company as of December 31, 1950. This date marks the completion of the twenty-first year of business of the Corporation.

FINANCIAL REVIEW OF 1950

Highlights of 1950 financial results are shown in a table on the opposite page, with comparative figures for the preceding nine years.

Gross Sales in 1950 were $102,312,498—70% more than in 1949. Following the start of fighting in Korea, our delivery program was accelerated. The effect of this acceleration is reflected to some extent in our 1950 sales figure.

Net Earnings for 1950 are reported as $6,242,064 or $3.12 per share—based on shares outstanding at the end of the year. Net Earnings are approximately 6% of Gross Sales, as compared to 5.34% in 1949.

Dividends totaling $4,000,000 (or $2.00 per share on shares now outstanding) were paid to stockholders during the year. Altho the company does not maintain a regular dividend rate, because of the fluctuating character of its business, we are proud of our record of having paid dividends in each of the twenty-one years of the company’s existence.

PROFIT LIMITATION LAWS

For several years, certain of our contracts have been subject to the Vinson-Trammell Act. Liability has been estimated as follows: $520,000 for 1948, $1,520,000 for 1949, and $280,000 for 1950, the exact amounts being indeterminable until completion of the contracts involved. The total provision for refund, as of December 31, 1950, now amounts to $2,320,000.

Certain other contracts are subject to renegotiation. As no basis for estimating our liability, if any, is known to us, no reserve for this has been created.

The figures in our Earnings Statement for 1950, and for several preceding years, cannot be regarded as final, until the exact result of these profit limitation laws has been determined.
CAPITALIZATION AND STOCK OUTSTANDING

The number of shares of Grumman Aircraft Engineering Corporation outstanding was increased from 1,000,000 to 2,000,000 shares, by a distribution made in November, 1950, of an additional share for each share then outstanding.

At the same time the capitalization of the Company was increased, by action of the Board of Directors, from $5,000,000 to $10,000,000. The present value of the Fixed Assets of the Company (over $6,000,000) and the growth of the business during the past several years made this change desirable.

Altho the stock distribution, in itself, creates no additional value, it serves to broaden the stock ownership of the Company. As of the end of 1950, the Company had 5,336 registered holders of stock, compared to approximately 3,000 at the end of 1948.

PLANT PROPERTY AND EQUIPMENT

During 1950, as in 1949, our investment in plant property and equipment continued to increase, and now stands at $6,068,563. Expenditures for new and replacement plant property and equipment resulted in a net increase after depreciation of approximately $225,000. A portion of the cost of the runway extension project, referred to in the last Annual Report, and which is now under construction, is included. By retaining a portion of our yearly earnings in the business, we have been able to meet the cost of such increases in plant investment, as well as the added working capital requirements of the increasing volume of business.

Engineering flight test programs, in recent years, have become more extensive and more numerous. Accordingly, the Company has leased, subject to cancellation or renewal, the flying field at Stuart, Florida. It is expected that the excellent test flying weather, that prevails in Florida, will more than offset the disadvantage of distance from our Main Plant, in accelerating engineering flight test programs.

PRODUCTS MANUFACTURED IN 1950

AIRCRAFT FOR THE ARMED SERVICES

A very high percentage of our 1950 volume of work was on military aircraft. No new designs were put into production, but the output of the three military models produced last year was accelerated during the year. These airplanes, including the "Panther," carrier-based jet fighter for the Navy—the "Albatross," a twin-engine utility amphibian for the Air Force, Navy and Coast Guard, and the "Guardian"—a single-engine anti-submarine plane, are illustrated in this report.

Squadrons of Grumman "Panthers," operating from aircraft carriers, were in action immediately following the outbreak of war in
Korea, and already have an excellent service record. This is the first
time in the history of American Sea Power that jet fighters have been
flown into combat from aircraft carriers. At this writing we have
been informed that Grumman "Panthers" are still the only Navy jet
fighters in action in the Korean campaign.

As during World War II, our Company has again, in the Korean
campaign, had serviceable planes ready when needed.

We are also proud of the work done by the "Albatross." This
amphibious aircraft, now in operation by the Air Rescue Service of
the Air Force, in Korea and other places scattered throughout the world,
has already saved the lives of many of our fighting men—in some cases
rescuing them from enemy held waters.

"Guardians"—anti-submarine planes, although now in service, have not
as yet been needed or used in actual warfare.

COMMERCIAL AIRPLANES

The manufacture and sale of the "Mallard," the twin-engine
executive type plane, was continued thru 1950. Owing to the current
restriction on the use of aluminum and other strategic materials for
commercial airplane production, the manufacture of "Mallards" will
be discontinued early this year.

NON-AERONAUTICAL PRODUCTS

Metal Boat Division

Our Metal Boat Division has manufactured, sold and delivered
approximately 22,000 units, since the start of this project over five
years ago—4,000 units in the year 1950. The 1950 dollar volume
amounted to approximately $500,000. The advantages of the use of
aluminum, and aircraft type of construction, has now been well proven
by the excellence of the service given by our products—canoes, sport
boats and dinghies. Limitation orders have been issued covering
civilian use of aluminum and other metals. The present outlook indi-
cates that the activity of our Metal Boat Division must be curtailed.

Aerobilt Bodies, Inc.

This wholly owned subsidiary corporation has continued the produc-
tion of aluminum alloy bodies during 1950. Again, the advantages of
the use of aluminum alloy, in appearance, maintenance, and weight
saving is becoming apparent to truck operators, and many firms have
equipped their fleets with these bodies. During the year, Aerobilt
sales amounted to approximately $1,000,000, with Net Earnings of
approximately $45,000 or 4½%. Curtailment of materials for civilian
use will place limits on future output. It is not as yet determined
whether the Company can continue profitable operation at a reduced output.

As in recent years, the commercial projects of the Company (constituting only about 3% of our total sales in 1950) were unimportant from a dollar volume standpoint—compared to the volume of military work.

OUTLOOK FOR 1951

In last year's Annual Report, we stated our backlog of work at approximately $200,000,000. Today it is greater, but, because of military restrictions, the publication of figures is discouraged. As this is written, our Nation has determined upon mobilization, and our output during 1951 will be restricted in no way, by lack of work. Our present facilities are expected to be fully utilized. We also intend to increase our output by increased subcontracting, thus utilizing some of the working force and facilities, made available by cut-backs in civilian production.

INCREASED TAXATION

The recently enacted Excess Profits Tax Act of 1950 is retroactive to July 1, 1950. Approximately half of our 1950 income is therefore subject to the increased rates, and the provision for Federal Income Taxes, in our 1950 Earnings Statement has been made accordingly. The Company's Excess Profit Credit—based on Income—the least unfavorable method for our Company—has been calculated at $4,250,000.

NOTE: This figure is based on the taxable income reported by the Company during the base years—there often being a substantial difference between income subject to taxation and income reported to stockholders although over a period of years these differences tend to offset one another.

The new Tax Law also provides for an overall ceiling on combined tax rates of 62% of corporation income. This may become the controlling factor in 1951, in view of the increased volume of business expected, provided that the earning rate is not reduced materially.

As estimated tax receipts still fall far short of the proposed huge Federal Budget, we face the probability of further tax increase.

ENGINEERING AND RESEARCH

Engineering activity continued to increase during 1950, and our Engineering Force today is larger than ever before in the history of the Company. On December 16, 1950, the existence of a national emergency was proclaimed by President Truman. Utilization of the
surplus capacity of the automotive and other commercial industries is being planned, as an aid to aircraft production, but the burden of accelerated design and engineering will fall upon the aircraft companies.

The "Panther," produced as Models F9F-2 and F9F-3, is being replaced in production lines by the F9F-5, similar in appearance, but with thinner wings, longer fuselage and increased thrust. This will be followed by the F9F-6, a swept-wing version. Work continued in 1950 on the design and construction of the XF10F, a new and advanced type of jet fighter.

As a result of winning an industry-wide design competition in 1950, work has started on the detailed design and construction of a new anti-submarine plane for the Navy.

The Company has continued its work on guided missiles and believes that its competitive position in that field is being adequately maintained. During the past year some test shots were fired and, with the impetus added by the present world situation, the amount of effort going into this project is gradually expanding.

In addition to the projects mentioned, our Company's engineering organization is constantly occupied with changes and maintenance engineering on types in production.

CONCLUSION

In behalf of the Board of Directors, we wish to express to all Grumman men and women our appreciation of their efforts and cooperation throughout the year.

For the Board of Directors,

[Signature]

Chairman of the Board.
APPROXIMATE DISTRIBUTION OF 1950 SALES INCOME

$46,413,673
FOR MATERIALS (INCLUDING SUBCONTRACTED ITEMS)
45.4%

$29,048,792
TO OUR EMPLOYEES
28.4%

$11,579,698
OPERATING OUR PLANTS
11.3%

$9,028,271
FOR TAXES
8.8%

$4,000,000
TO STOCKHOLDERS
3.9%

$2,242,064
RETIAINED IN THE BUSINESS
2.2%
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<tr>
<th>ASSETS</th>
<th>1950</th>
<th>1949</th>
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<tr>
<td><strong>CURRENT ASSETS</strong></td>
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<tr>
<td>Cash</td>
<td>$10,878,667</td>
<td>$5,557,583</td>
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<tr>
<td>United States Government securities</td>
<td>5,549,200</td>
<td>10,009,782</td>
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<tr>
<td>Accounts receivable (United States Government 1950 $10,747,679—1949 $5,119,016)</td>
<td>11,890,900</td>
<td>5,785,962</td>
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<tr>
<td>Inventories (at cost) (Note 1)</td>
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<tr>
<td>Finished goods and work in process</td>
<td>$23,588,188</td>
<td>$18,761,982</td>
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<td>Raw materials and purchased parts</td>
<td>13,140,550</td>
<td>11,898,778</td>
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<td>Deduct billings and progress payments</td>
<td>18,947,745</td>
<td>13,711,210</td>
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<td>Supplies</td>
<td>250,415</td>
<td>204,888</td>
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<td>Prepaid expenses and miscellaneous deposits</td>
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<td>228,007</td>
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<td><strong>TOTAL CURRENT ASSETS</strong></td>
<td>$46,706,817</td>
<td>$38,735,772</td>
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<td><strong>FIXED ASSETS</strong></td>
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<td>Buildings, machinery, equipment, etc</td>
<td>$8,181,882</td>
<td>$7,673,297</td>
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<td>Less accumulated depreciation (Note 2)</td>
<td>2,533,647</td>
<td>2,210,009</td>
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<td>$5,648,235</td>
<td>$5,463,288</td>
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<td>Land</td>
<td>420,328</td>
<td>379,668</td>
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<td>$6,068,563</td>
<td>$5,842,956</td>
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<td>$52,775,380</td>
<td>$44,578,728</td>
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(See notes relating to...
## ENGINEERING CORPORATION

### XDIARY

### BALANCE SHEET

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<tr>
<th>LIABILITIES</th>
<th>1950</th>
<th>1949</th>
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<tr>
<td><strong>CURRENT LIABILITIES</strong></td>
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<tr>
<td>Accounts payable and accrued wages</td>
<td>$6,335,568</td>
<td>$3,692,858</td>
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<td>Estimated liability under incentive fixed price</td>
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<td>contracts with the United States Government</td>
<td>$8,928,397</td>
<td>$10,242,738</td>
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<td>and under the Vinson-Trammell Act (Note 3)</td>
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<td>Federal taxes on income</td>
<td>$6,892,757</td>
<td>$2,706,764</td>
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<tr>
<td>Other taxes</td>
<td>$978,549</td>
<td>$456,548</td>
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<tr>
<td>Other liabilities</td>
<td>$339,270</td>
<td>$421,045</td>
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<td><strong>TOTAL CURRENT LIABILITIES</strong></td>
<td>$23,474,541</td>
<td>$17,519,953</td>
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| CAPITAL STOCK AND EARNINGS RETAINED FOR USE     |               |               |
| IN THE BUSINESS                                 |               |               |
| Capital stock—$1.00 par value—                 |               |               |
| authorized 3,000,000 shares—                    |               |               |
| outstanding 1950 2,000,000 shares, 1949         | $10,000,000    | $5,000,000     |
| 1,000,000 shares—stated value                   |               |               |
| Earnings retained for use in the business       | $19,300,839    | $22,058,775    |
| **TOTAL**                                       | $29,300,839    | $27,058,775    |

|                                               | $52,775,380    | $44,578,728    |

(Prepared in accordance with generally accepted accounting principles.)

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GRUMMAN AIRCRAFT ENGINEERING CORPORATION
AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF INCOME AND EARNINGS
RETAINED FOR USE IN THE BUSINESS

INCOME

Sales, including costs and fees under cost-plus-a-fixed-
fee contracts (Note 3) .............................................. $102,812,498 $59,756,838

Other Income

Interest ............................................................... 176,638 155,699
Other credits ...................................................... 44,691 52,740
$ 221,329 $ 208,439

$102,533,827 $59,965,277

Deduct

Wages, salaries, materials, and other costs and
expenses .............................................................. $ 89,171,738 $52,646,510
Provision for Federal taxes on income ................. 6,840,025 2,607,247
Provision for estimated refund of profits to United
States Government under Vinson-Trammell Act .... 280,000 1,520,000
$ 96,291,763 $56,773,757

Net Income .......................................................... $ 6,242,064 $ 3,191,520

EARNINGS RETAINED FOR USE IN THE BUSINESS

Balance, January 1 ................................................ $ 22,058,775 $20,867,255
Net income, year ended December 31 .................. 6,242,064 3,191,520
$ 28,300,839 $24,058,775

Deduct

Distribution of 1,000,000 shares ($1.00 par value)
capital stock ....................................................... $ 1,000,000
Amount transferred to capital stock .................... 4,000,000
Dividends paid—in cash ........................................ 4,000,000 2,000,000
$ 9,000,000 $ 2,000,000

Balance, December 31 ............................................. $19,300,839 $22,058,775

(See notes relating to financial statements.)
GRUMMAN AIRCRAFT ENGINEERING CORPORA TION AND SUBSIDIARY

Notes Relating to Financial Statements—1950

1—Deductions from inventories in the amount of $18,947,745 include progress payments of $16,785,363 applicable to contracts with the United States Government. With respect to these contracts the Government has a lien on the work in process and on the materials allocated thereto.

2—The Corporation has included provision for depreciation in its statement of income calculated on the cost of the assets depreciated. The amount of depreciation for the year 1950 was $590,016.

3—Approximately 67% of the 1950 sales are subject to the Renegotiation Act of 1948. Renegotiation proceedings for the year 1949 have not been completed. As no basis is known for estimating the Corporation's liability, if any, under this act, no provision has been made therefor. Contracts from which a substantial portion of the Corporation's income for the year was derived provide for the redetermination of prices. Price redeterminations with respect to contracts in process at December 31, 1950 were made by the Corporation at that date and, although the redetermined prices have not been ratified by contract amendments, it is the opinion of the management that the amount of $8,928,397 is sufficient to provide for refunds to the United States Government under incentive fixed price contracts and to comply with the Vinson-Trammell Act, based on the status of the contracts at December 31, 1950.

4—The accompanying balance sheet does not include cash deposited in separate bank accounts representing amounts deducted from payrolls for employees' income taxes and subscriptions to United States Savings bonds.
To the Directors and Stockholders of
Grumman Aircraft Engineering Corporation:

We have examined the balance sheet of Grumman Aircraft Engineering Corporation and Subsidiary as of December 31, 1950, and the statements of income and earnings retained for use in the business for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances, except that it was impracticable to confirm by direct correspondence amounts due from the United States Government, as to which we satisfied ourselves by other auditing procedures.

In our opinion, subject to adjustments, if any, which may be required in the amount of profit on contracts subject to the Renegotiation Act of 1948 (see Note 3), the accompanying balance sheet and statements of income and earnings retained for use in the business present fairly the position of Grumman Aircraft Engineering Corporation and Subsidiary at December 31, 1950, and the results of operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

HURDMAN AND CRANSTOUN
Certified Public Accountants

February 28, 1951
THE GRUMMAN ALBATROSS

The largest of a long line of Grumman amphibians, the Albatross was originally developed for the U. S. Navy. It is used by this service, the Air Force and the Coast Guard, as well.

Active in the Korean theatre, this rugged amphibian specializes in the important work of saving lives. The Albatross is flown by pilots of the Air Rescue Service of the Air Force on open sea pick-ups in all kinds of weather and at times under enemy fire.
THE GRUMMAN PANTHER

This sequence of photographs, taken aboard a U.S. Navy carrier in Korean waters, shows Grumman F9F Panthers in take-off and landing operations. 

Upper left: A Panther is taxied past the carrier island. Middle left: With wings still folded, a F9F approaches catapult position. Lower left: A crewman adjusts Panther’s nose wheel for catapult take-off.
Upper right: The Panther on the left has just been released from the catapult. The Panther at right is ready to follow. Middle right: A Panther in flight. Lower right: The approach for a carrier landing.

First Navy plane to shoot down a Russian-type MIG-15 jet, the Panther serves not only on carriers but is flown from land bases in Korea and Japan by U.S. Marine Corps pilots.
Above, preparing to take-off from its carrier deck is a Navy Guardian. The function of this particular plane is to destroy enemy submarines located by the more heavily radar-equipped Guardians, as shown to the left.

The amount of space saved on carriers by the Grumman folding wing is obvious when the two photographs are compared.
THE GRUMMAN MALLARD

The commercial, twin-engined Mallard amphibian was manufactured and sold throughout 1930. An 8-10 passenger executive type aircraft, it is owned by many leading corporations and individuals in the United States and abroad.
GRUMMAN METAL BOATS

Over 22,000 metal boats had been produced by the end of 1950. Top photograph shows the 19-foot square-ender under sail. Center: the sales-leader of the line, the popular 15-footer. Below: the 15-foot Sport Boat, a new model introduced in 1950.
AEROBILT BODIES, INC.

A wholly owned subsidiary, this corporation produced Kargo-King truck bodies, such as shown in the above photograph, for many important fleet operators.

Below are seen examples of the KurbSide Model, also manufactured and sold throughout 1950.